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## ABSTRACT

This booklet is a report of the health status and service needs of America's children. It presents a summary of sentinel health measures reflecting both what has been accomplished and what challenges remain. The first section describes the general population to provide a context for health measures. In the second section, selected health status measures are presented graphically with accompanying text organized according to three age groups--infants, children, and adolescents. In the third section, measures of health services utilization are presented. (JD)

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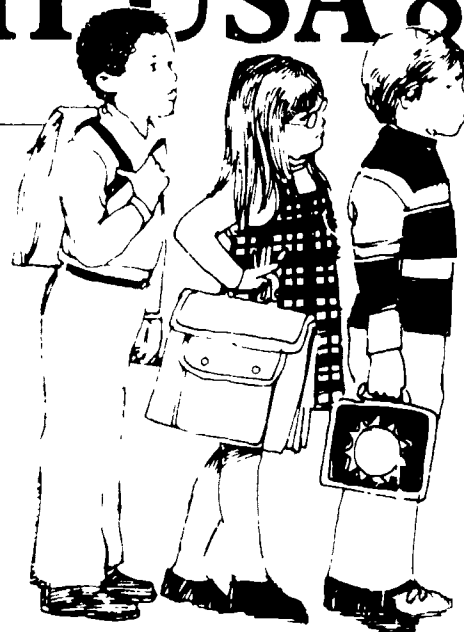
ED 314 421

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Health Resources and Services Administration

# CHILD HEALTH USA'89



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## **HEALTH RESOURCES AND SERVICES ADMINISTRATION**

**"HRSA—Helping Build A Healthier Nation"**

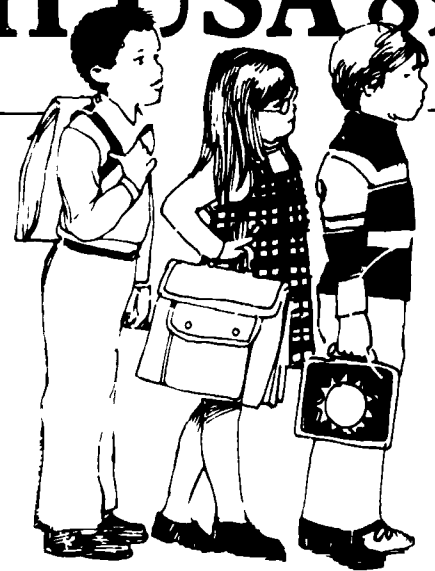
The Health Resources and Services Administration has leadership responsibility in the U.S. Public Health Service for health service and resource issues. HRSA pursues its objectives by:

- Supporting states and communities in delivering health care to underserved residents, mothers and children and other groups;
- Participating in the campaign against AIDS;
- Serving as a focal point for federal organ transplant activities;
- Providing leadership in improving health professions training;
- Tracking the supply of health professionals and monitoring their competence through operation of a nationwide data bank on malpractice claims and actions; and
- Promoting developments affecting health facilities, especially those in rural areas.

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# CHILD HEALTH USA'89

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Health Resources and Services Administration  
Bureau of Maternal and Child Health and Resources Development  
Office of Maternal and Child Health

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## PREFACE

**Child Health USA 1989** is a report of the health status and service needs of America's children. It presents a summary of sentinel health measures reflecting both what we have accomplished for our children and what challenges yet remain.

This report was compiled as a result of a collaborative effort between the National Center for Health Statistics and the Office of Maternal and Child Health pursuant to the implementation of Section 509, (42 U.S.C. 701) Part (a) (5) of Title V of the Social Security Act as amended. It was designed to highlight information related to child health by appropriate growth and developmental groupings in a single publication displayed in a readily accessible and readable manner. Over time it is expected that this report may change and expand not only in content but in format as well, reflecting the dynamic needs of children and a better understanding of effective means to communicate the nature of those needs. In part, it fulfills the responsibility to disseminate information to the maternal and child health community, constituents, policy makers, and to public and private organizations.

Child Health USA 1989 is comprised of three sections. The first section describes the general population to provide a context for health measures. The second, selected health status measures are presented graphically with accompanying text organized according to three age groups—infants, children and adolescents. In the third section, measures of health services utilization are presented. The availability of comparable national data was the major criterion used to select the indicators presented in this report.

Publication of this report would not have been possible without the contributions of numerous staff members throughout the Office of Maternal and Child Health, the National Center for Health Statistics, and several other agencies. These people gave generously of their time and knowledge, providing data from their surveys and programs. A special thanks goes to a group of national experts who provided guidance and direction to this effort; their cooperation and assistance are gratefully acknowledged.

While we have tried to provide a comprehensive, accurate and current summary of key indicators of child health, the information in this report may become outdated quickly and almost certainly have significant gaps and other built-in limitations. Consequently, interpretation of the information in this monograph should be viewed as a point of departure for subsequent efforts to obtain information that facilitates the promotion of health and the prevention of disease among our children.

### Explanatory Notes:

- Age breaks may vary among health indicators, depending on the source of the data. Where possible, the following age categories were used: <1, 1-4, 5-9, 10-14, 15-19, 20-21 years.
- Materials printed in italics is related information not reflected in the visual.
- Hispanic persons may be of any race; thus, the reader may need to refer to the specific data source for clarification.

## INTRODUCTION

*"For the purpose of enabling..."*

The health and well-being of families and children is the truest measure of any great society. Indeed it is one of the most important priorities for this great nation. Children, as children, are constantly growing and developing. This basic dynamic characteristic accounts for both their increased vitality and vulnerability and requires specific health approaches in relation to the child's changing needs.

The health of America's children is far better today than at any time in the past. Many of the serious childhood illnesses, like the common infectious diseases that threatened children in the earlier part of this century, have all but disappeared.

While national progress toward improved child health has been marked, analysis of trends within this country and comparisons with other developed nations indicate that we must remain steadfast. Infant mortality was the first issue studied by the Children's Bureau in 1913. Yet despite significant reductions in the infant mortality rate throughout this century,

it is still an issue that challenges us today. Improvements in infant mortality and low birth weight rates have slowed recently. In addition, it is clear that all groups have not benefited equally. There is a long-standing disparity in infant survival by blacks and whites, and the number of infants dying varies significantly among states. The causes of these variations are complex and in some cases unknown. The United States ranks 22nd among industrialized nations in infant mortality, and its position has not improved since 1980. Sharp discrepancies persist in the health status and receipt of health services based on income, ethnic background and geographic location. These vary between States, region and localities.

The health needs of children are also not immune to ever changing social, behavioral, economic and psychosocial influences. The issues affecting the health of mothers and children are consequently broad in scope and continue to challenge our intellect and our imagination. The prevention of unintended injuries—which, after the first year of life account for more childhood deaths than any other cause—is now properly seen as an

issue for the child health community. With technological advances that can save and extend the lives of fragile newborns, the issue of the quality of those lives as those children grow and develop must concern us. And how to enable a child with chronic or disabling conditions to develop to his or her fullest potential is another compelling issue. Pediatric AIDS is the newest issue to threaten our children.

The Bureau of Maternal and Child Health and Resource Development has begun the all important and arduous task of synthesizing and disseminating data and information on the health status of America's children. The Bureau was created October 1, 1987, but its roots go back more than 75 years. Established by Federal statute in 1912, the Children's Bureau was directed to "investigate and report... upon all matters pertaining to the welfare of children and child life among all classes of our people." Among the issues the Bureau was instructed to look into were "the questions of infant mortality, the birth rate, orphanage,



desertion...accidents and diseases of children...and legislation affecting children in the several States and territories." A wealth of information and new knowledge resulted from these early inquiries encouraging States to modernize their laws and the child health community to develop and improve services for mothers and children.

Over the years, numerous efforts both by the public and private sectors have been successfully directed toward resolution of many of the maternal and child health concerns. While we can take pride in our achievements, the unfinished agenda in child health remains very great and much remains to be done. It is our collective responsibility to take up the challenge for all the children's sake with renewed commitment and direct our energies to assure healthy pregnancies and improve our children's chances for a healthy birth and a healthy life. Those who care for and cherish our nation's most precious resource—its children—face both old and new challenges every day. It is our belief and hope that wisdom will be gained from reports such as this and will be translated for the purpose of enabling the development of

prevention programs, compassionate care, and societal reforms that will enhance and protect the health of mothers and children throughout our nation.

Office of Maternal and Child Health  
Child Health Day  
October 2, 1989

## POPULATION CHARACTERISTICS

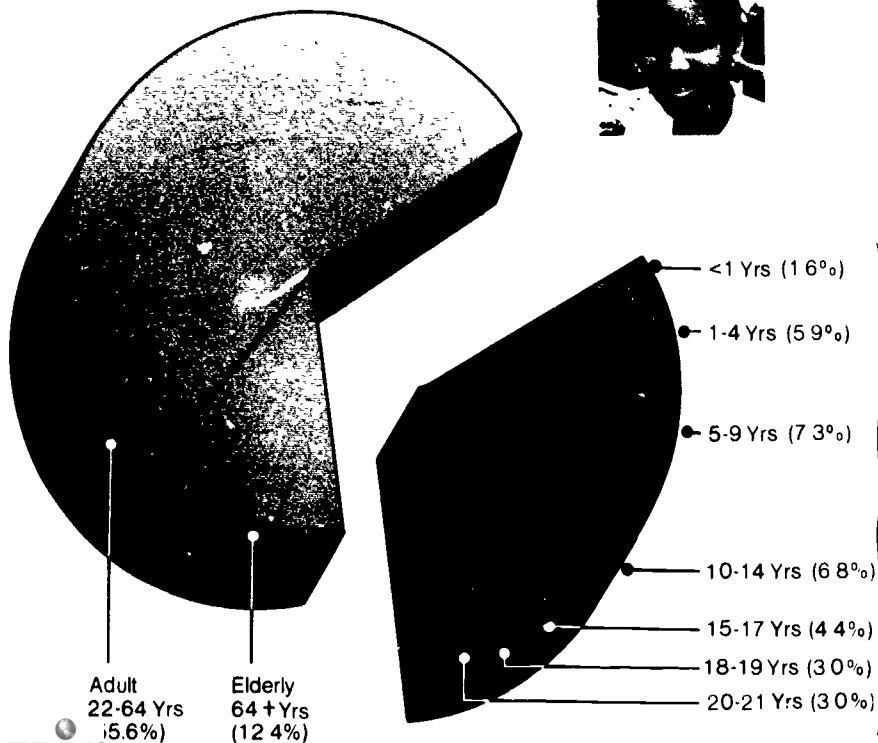


There are many socio-demographic characteristics that are used to describe the maternal and child population (i.e. race, age, poverty status). Policy makers, whether at the national, state or local level, use this information to systematically address the health problems of the mothers and children they serve and to develop programs and allocate resources that best meet their needs.

We have chosen the following population descriptors because of their importance to program development in maternal and child health: population by age, poverty, living arrangements, childcare and school dropout.

## U.S. Population by Age Group 1988

Source: U.S. Bureau of the Census



## POPULATION OF CHILDREN

In 1988, there were 78.6 million children through the age of 21 in the United States, representing 32% of the total population.

Although there were 16 million more children under 18 years of age in 1988 than in 1950, this age group is declining proportionally relative to other age groups in the population.

There was an 11% increase in the number of children under 5 years of age between 1980 and 1988.

In 1988, persons aged 65 and over represented almost 12% of the total population. By the year 2000, their numbers are expected to increase by 21.5% whereas the child population (aged 0 through 21) is expected to decrease by 4.7% over the 1988 figures.

## POPULATION CHARACTERISTICS

### POVERTY

In 1987 there were 13 million children under 18 years of age living in poverty.

Between 1980 and 1987, the number of children living in poverty increased by 1.5 million; in contrast, the number of persons 65 years and over living in poverty declined by 3.8 million.

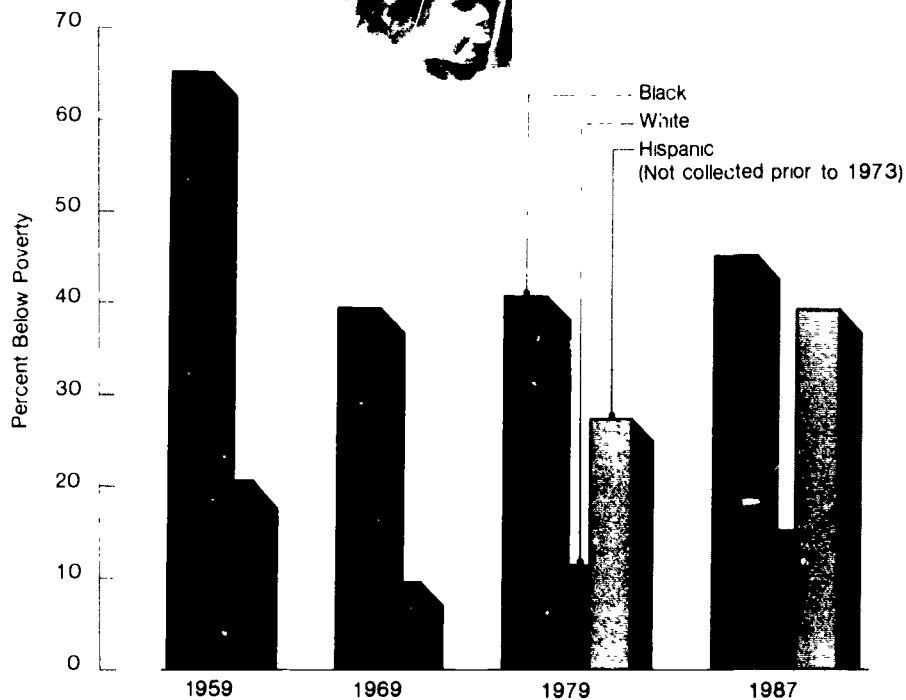
Black or Hispanic children are nearly 3 times more likely to live in poverty than are white children.

\*In 1987, a family of four was considered to be living in poverty if its annual income was below \$11,611.

Note: Hispanic data not collected prior to 1973.

### Children in Poverty Children Under 18 Years of Age 1987

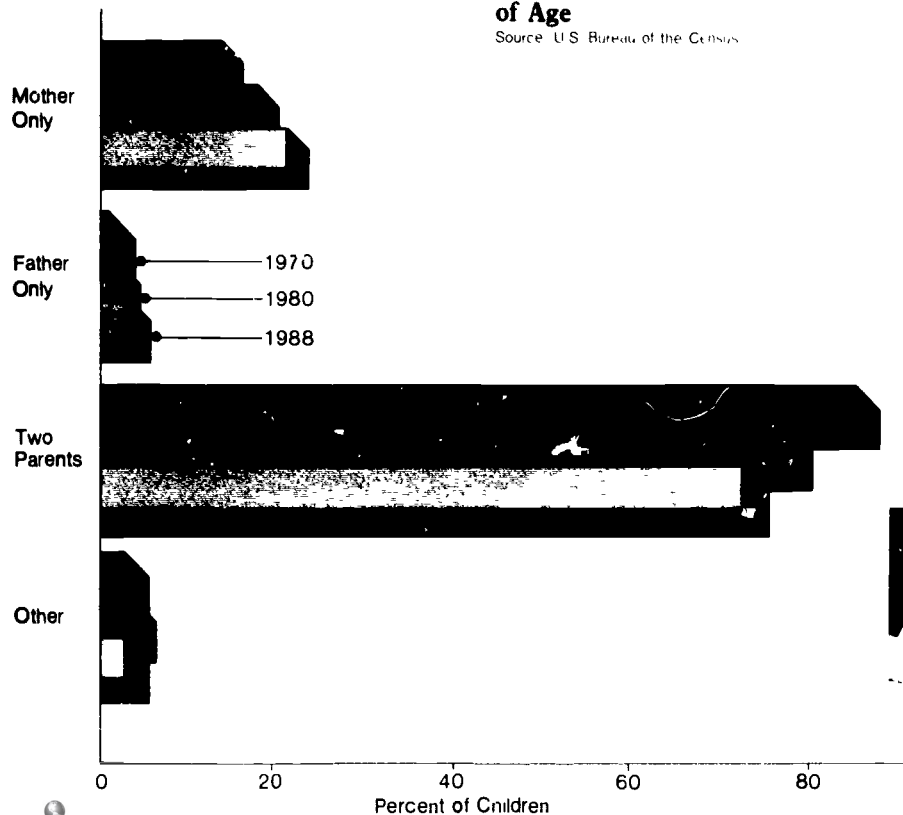
Source: U.S. Bureau of the Census



Years 12

### Living Arrangements Children Under 18 Years of Age

Source: U.S. Bureau of the Census



### FAMILY STRUCTURE

In 1988, 15.3 million children—24.3% of all children under 18 years of age—lived with one parent only, an increase of 12.4% since 1970.

In 1988, the vast majority of single parent families (88%) consisted of children living with their mothers.

Black children are nearly 3 times as likely as white children to live in a single parent household.

In 1987, almost half (46%) of the children living only with their mothers were poor.



## POPULATION CHARACTERISTICS

### CHILD CARE

#### Working Mothers

In 1985 nearly half of the mothers of preschool children (under 6 years of age) were in the labor force, an increase of 75% since 1970.

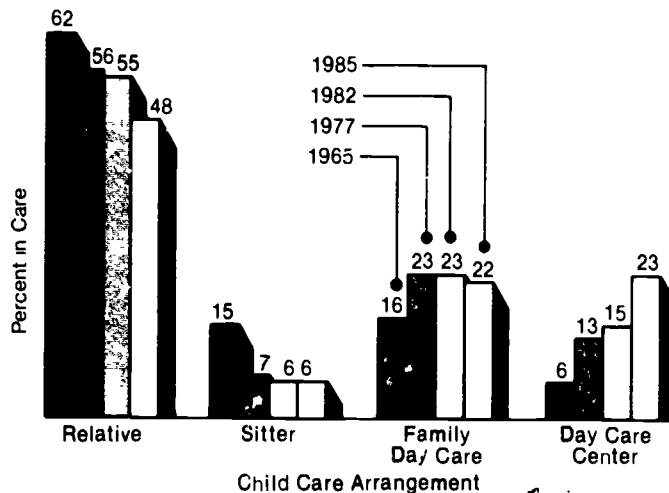
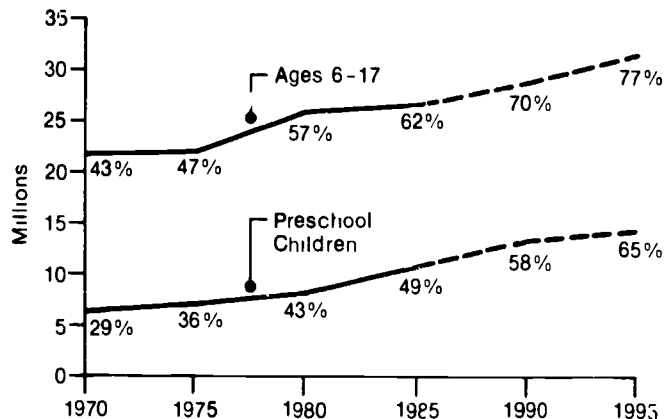
Although mothers of older children are more likely to be in the work force, between 1970 and 1985 the greatest increase in workforce participation has been by mothers of children under 6 years of age.

#### Preschool Care

In 1985 over one fifth of children under six years of age whose mothers worked outside of the home were in day care centers.

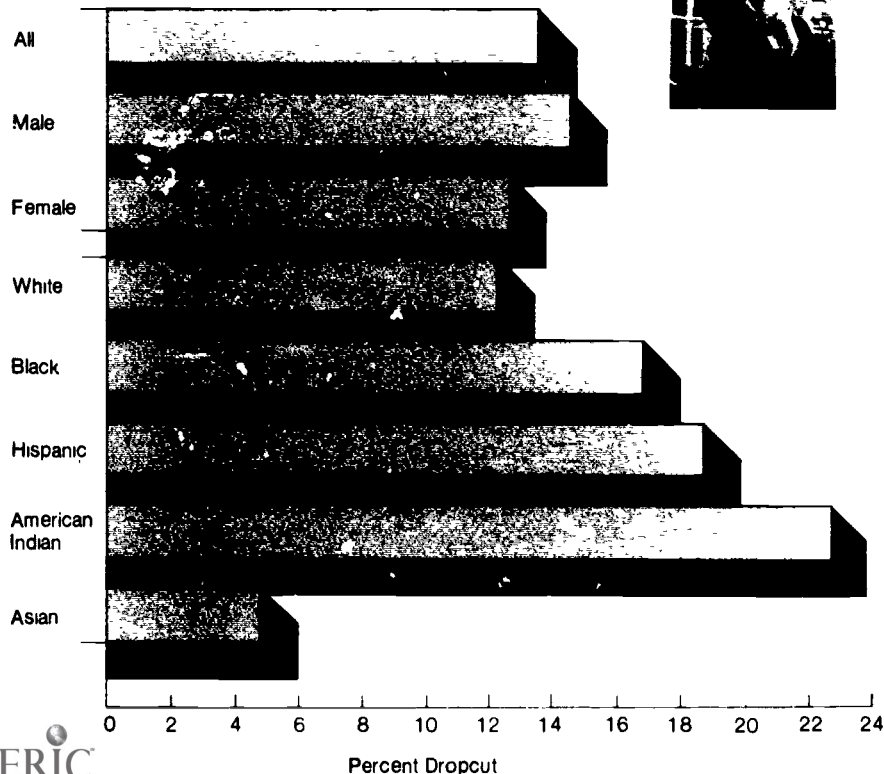
The largest shift in child care arrangements in the last 20 years has been away from relative and sitter care toward the use of day care centers.

*Women who work full time tend to use day care centers while women who work part time are more likely to use family day care homes.*



## School Dropout by Sex and Race/Ethnicity 1980-1982

Source: Center for Education Statistics



## SCHOOL DROPOUT

Nearly 14% of high school sophomores in 1980 did not finish high school in 1982.

The school dropout rate is higher for males (14.6), than for females (12.6) and varies among racial groups.

Blacks drop out at an almost 40% higher rate than whites; Hispanics drop out at a 53% higher rate than whites.

American Indians, who have the highest dropout rate of any group are almost twice as likely to drop out as whites. Asians have the lowest dropout rate, only 4.8%.

*In 1985, over 1 million 18 and 19 year olds reported themselves as not being high school graduates or currently enrolled.*

Note: A dropout is defined as a high school sophomore in the spring of 1980 who was neither enrolled in high school nor a high school graduate or the equivalent at the time of the following survey in 1982.

## HEALTH STATUS



### *INTRODUCTION*

The measurement of the health status of our children is important because it enables us to assess the impact of our past and current programs and to plan for the future. The data in this section was primarily obtained through analysis of national surveys which, though limited in sample size, are representative of the populations we serve.

The health status indicators are presented by age group: infant, child, and adolescent. Although there is some overlap, the data is displayed by the age-specific importance of its contribution.

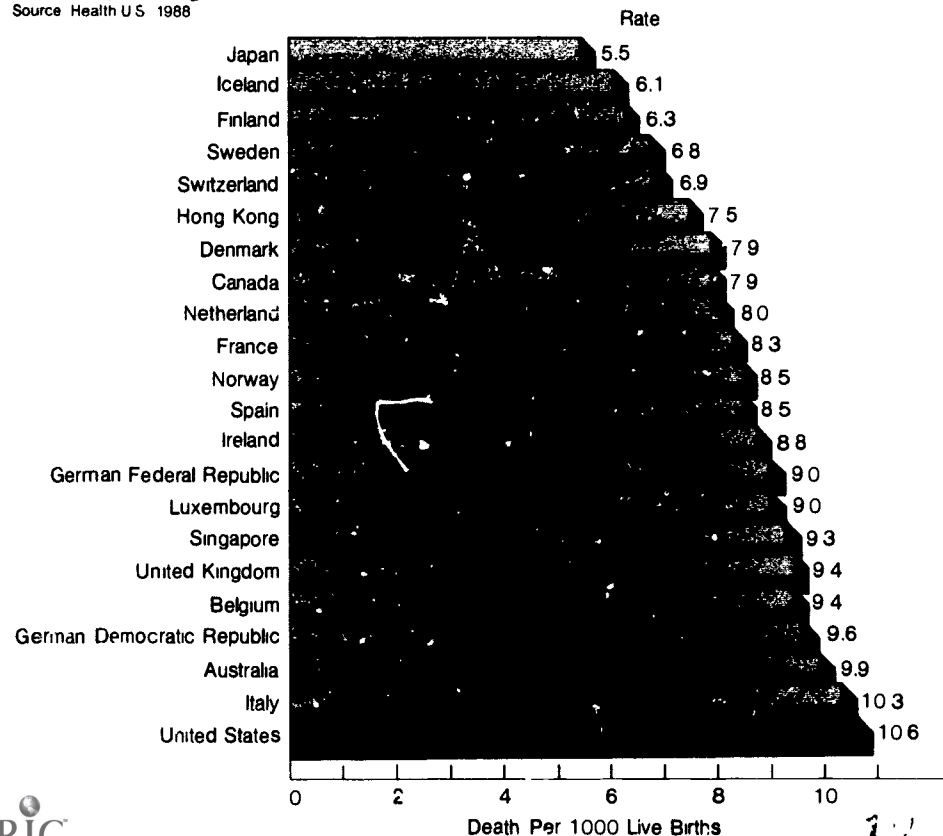
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## HEALTH STATUS—Infant

### Cross-National Infant Mortality Ratings:1985

Source: Health U.S. 1988



### CROSS-NATIONAL INFANT MORTALITY

Although the United States has greatly reduced its infant mortality rate since 1965, it still ranks behind 21 other industrialized countries.

In 1950, Japan ranked 17th worst among developed countries in infant mortality, with a rate of 60.1; whereas the United States ranked 6th, with a rate of 29.2. In 1985, the rate of infant mortality in Japan (5.5) was the lowest in the world.

## HEALTH STATUS—Infant

### INFANT MORTALITY

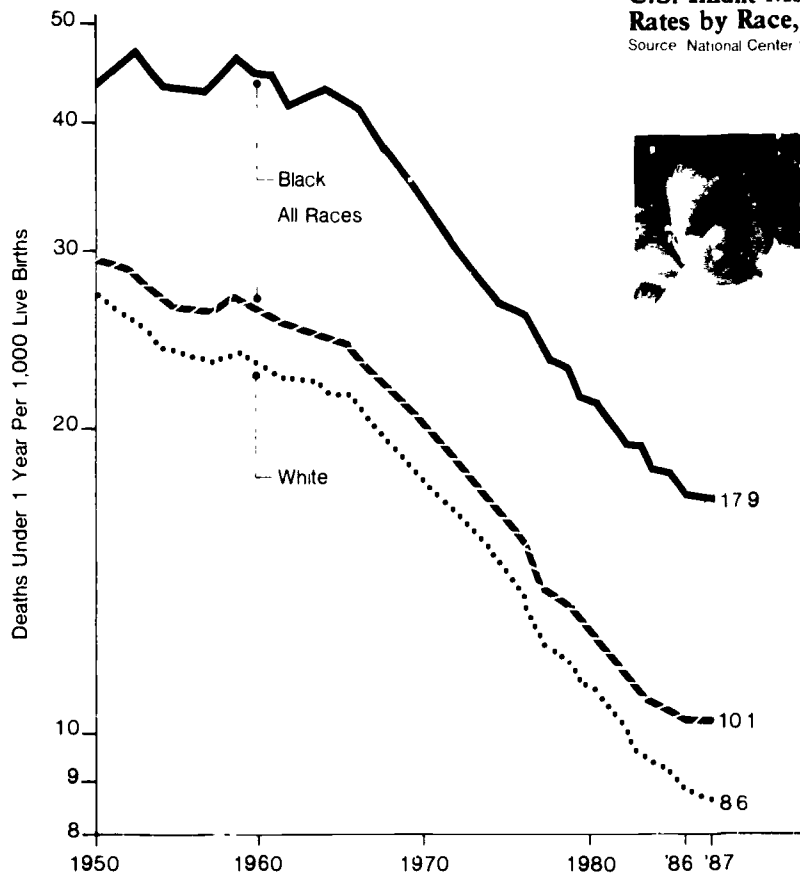
In 1987, 3,809,394 babies were born in the United States, with 38,408 of them dying before their first birthday. The infant mortality rate was 10.1 deaths per 1,000 live births.

The rapid decline in the infant mortality rate during the 1960's and 1970's has slowed for both blacks and whites in the 1980's.

The infant mortality rate for black infants remains almost twice as high as that for white infants.

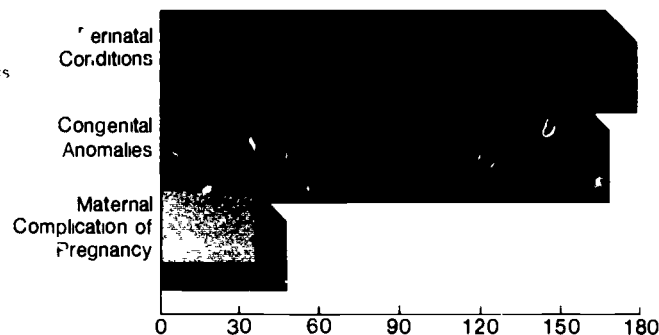
### U.S. Infant Mortality Rates by Race, 1950-1987

Source: National Center for Health Statistics



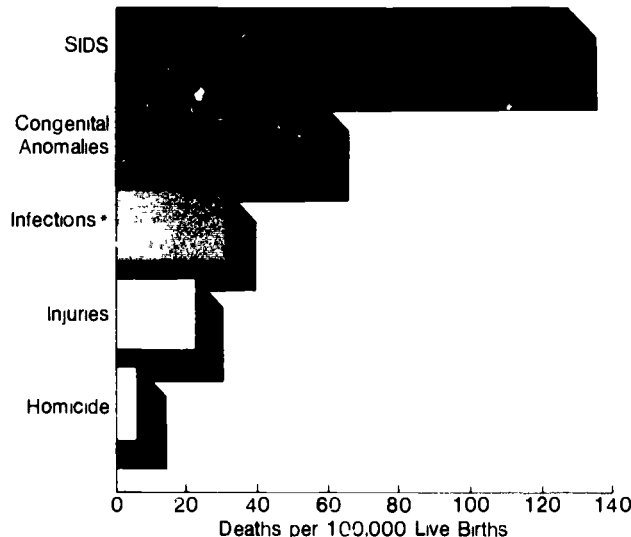
### Leading Causes of Neonatal Mortality 1987

Source: National Center for Health Statistics



### Leading Causes of Postneonatal Mortality 1987

Source: National Center for Health Statistics



### NEONATAL AND POSTNEONATAL MORTALITY

#### Neonatal

In 1987, 24,627 infants under the age of 28 days died; the neonatal mortality rate was 647 deaths per 100,000 live births.

#### Postneonatal

In 1987, 13,781 infants ages 28 days up to one year died; the postneonatal mortality rate was 362 per 100,000 live births.

Of the five leading causes of postneonatal death, infections, injuries, and homicides may be prevented with appropriate intervention.

*Between 1960 and 1986, the postneonatal mortality rate decreased faster for black infants than for white infants.*

Note: The asterisk (\*) entitled infection includes pneumonia, influenza, septicemia, meningitis, tetanus, and viral diseases.

## HEALTH STATUS.—Infant

### LOW BIRTH WEIGHT

In 1987, 6.9% of all live births (262,344 babies) were low birth weight, that is, they weighed less than 2,500 grams or 5½ pounds at birth.

The percent of low birth weight births has not decreased since 1980.

*Low birth weight is the factor most closely associated with neonatal mortality. Low birth weight infants are more likely to experience long term disabilities or to die during the first year of life.*

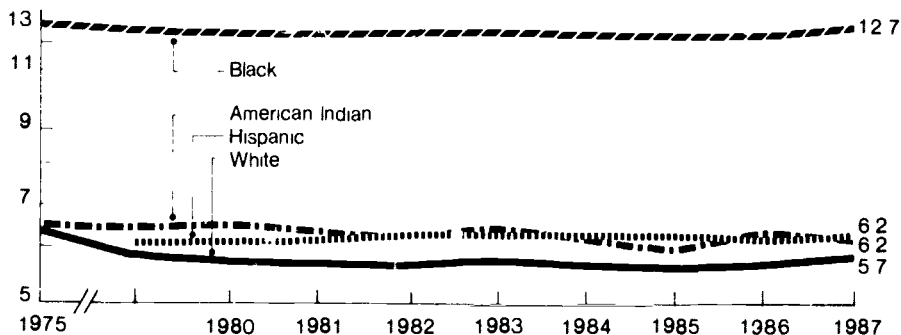
*Social factors associated with increased risk of low birth weight include: poverty, low level of educational attainment, unmarried status and minority status.*



### Low Birth Weight Ratios, 1975-1987

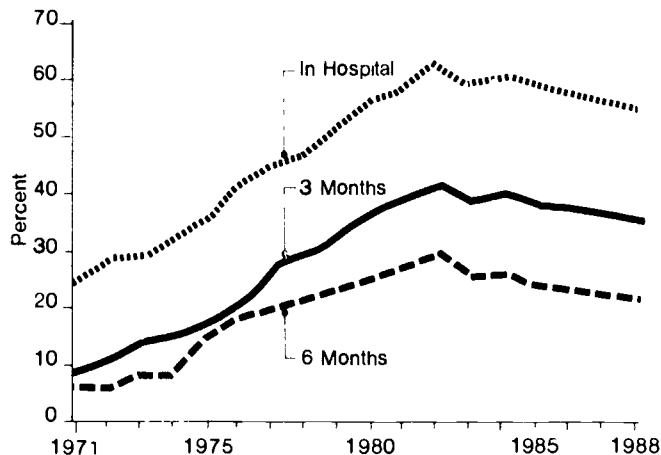
Source: National Center for Health Statistics

Percent of Live Births  
Below 2,500 Grams



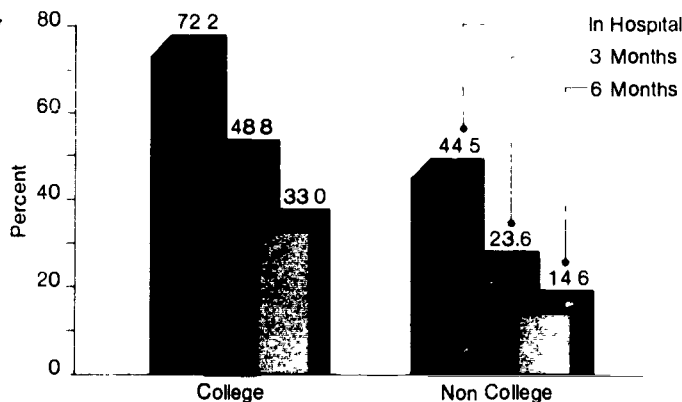
### Percent Breastfeeding: 1971-1988 All Races

Source: Ross Laboratories



### Percent Breastfeeding by Education 1988

Source: Ross Laboratories



## INFANT FEEDING

### Trend

From 1971 to 1982, the percent of mothers who initially breastfed increased steadily to a high of 62%. Since then there has been a slight but continuous decline to 54% in 1988.

Although proportionally fewer women are breast feeding at 3 and 6 months, the overall trend parallels that of women breastfeeding in-hospital.

### Education

Higher educated women are more likely to breastfeed.

Breastfeeding both in-hospital and after 6 months is considerably higher for women who have attended college.

*Breastfeeding rates continue to be highest among women who are older, better-educated, relatively affluent, and/or who live in the western United States. Conversely, women least likely to breastfeed are those who are low-income, black, under 20 years of age, and/or who live in the southeastern United States.*

Note: Data obtained through questionnaire mailed to mothers six months after delivery concerning their infant feeding practices. In 1988, this sample represented 82% of all new mothers in the United States.

## HEALTH STATUS—Infant

### PEDIATRIC AIDS

As of April 1989, 1561 cases of AIDS in children younger than 13 years of age had been reported in the U.S. These children represent approximately 1.7% of all reported AIDS cases.

The majority of pediatric AIDS cases result from transmission by HIV risk mothers, with a disproportionate number of cases occurring in Black and Hispanic children.

*The number of cases of AIDS, as reported by the Centers for Disease Control (CDC), does not include children who are infected with HIV who are either asymptomatic or in the early stage of disease.*

#### Notes

**HIV Risk Mother:** Mother with/at risk for AIDS HIV infection—

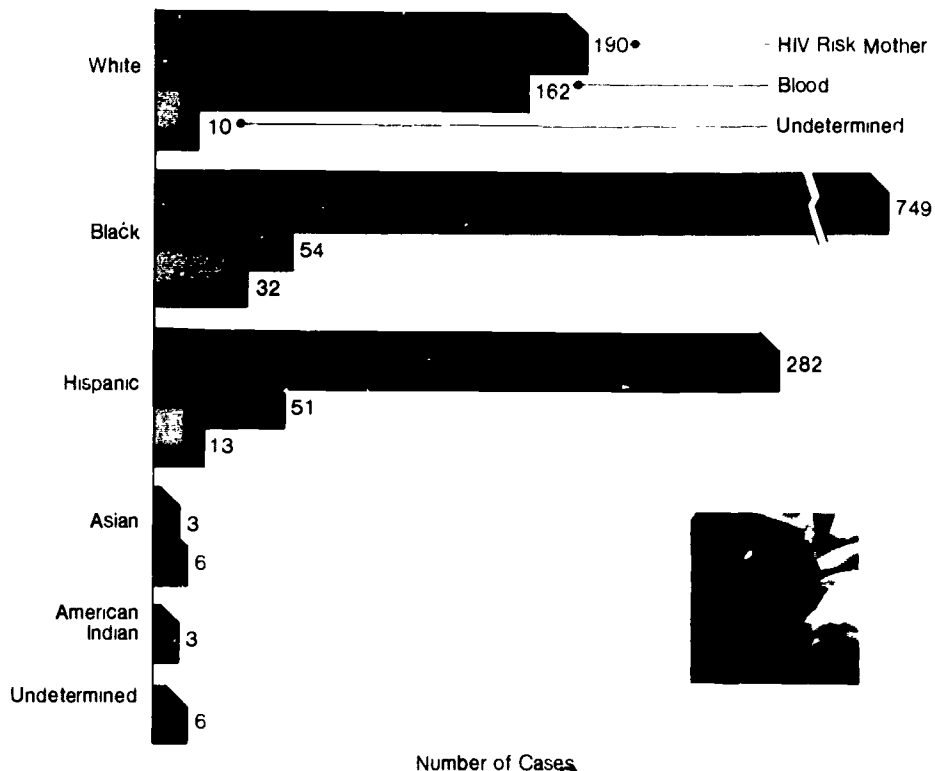
- IV drug use
- Sex with IV drug user
- Sex with bisexual male
- Sex with person with hemophilia
- Born in Pattern II country
- Sex with transfusion recipient with HIV infection
- Sex with person with HIV infection, risk not specified
- Receipt of transfusion of blood, blood components, or tissue
- Has HIV infection, risk not specified

#### Blood

- Hemophilia, coagulation disorder
- Receipt of transfusion blood, blood components, or tissue

### Pediatric AIDS by Race and Exposure Category 1988

Source: Centers for Disease Control



## CONGENITAL ANOMALIES

### Down Syndrome

Down syndrome is one of the leading causes of mental retardation. Recent increases in its incidence may be due to an increasing proportion of births to older women who are at higher risk of giving birth to an infant with Down syndrome.

### Spina Bifida

Based upon rates from the Birth Defects Monitoring Program at the Centers for Disease Control (CDC), from 1980 through 1987, an estimated 13,600 in-

fants born in the U.S. had spina bifida without anencephaly. Approximately 3800 have died as a result of their defects.

The estimated rate of infants born with spina bifida has decreased from 1980 (5.2 per 10,000 live births) through 1987 (4.3 per 10,000 live births). However, an increasing proportion of these infants survive into childhood each year.

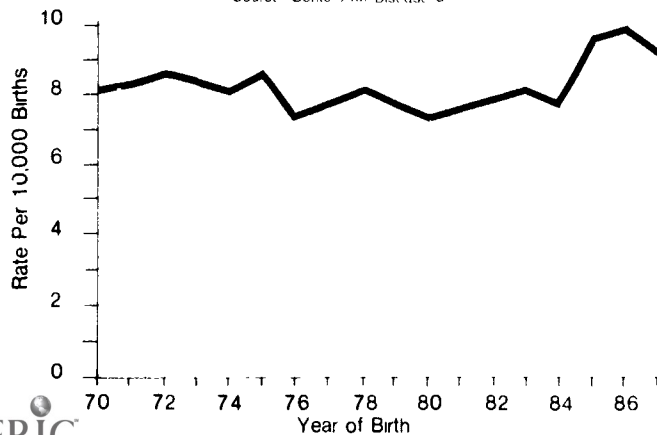
*Approximately 100,000 infants are born each year in the United States with serious congenital anomalies.*

*In 1986 there were 8,244 infant deaths related to congenital anomalies, accounting for 21% of all infant deaths.*

*1.2 million infants, children, and adults are hospitalized each year for treatment of congenital anomalies.*

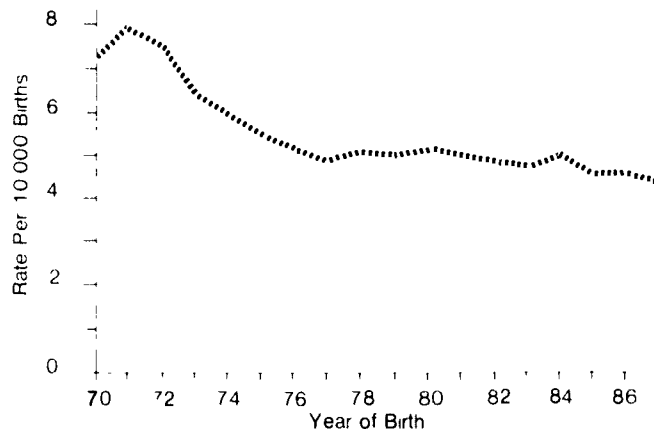
### Down Syndrome

Source: Centers for Disease Control



### Spina Bifida without Anencephalus

Source: Centers for Disease Control



# HEALTH STATUS—Infant

## STATE SPECIFIC INFORMATION

### INFANT MORTALITY, LOW BIRTHWEIGHT, AND EARLY PRENATAL CARE BY RACE: 1987

State	Infant Mortality			Low Birthweight			Early Prenatal Care		
	All	White	Black	All	White	Black	All	White	Black
Alabama	12.2	8.8	19.0	8.0	5.9	12.2	73.2	79.2	59.0
Alaska	10.4	8.3	*8.5	4.8	4.5	9.4	77.2	80.6	71.6
Arizona	9.5	8.9	15.7	6.4	6.3	11.8	71.6	73.7	66.3
Arkansas	10.3	8.7	15.7	7.7	6.4	12.1	69.5	74.6	52.7
California	9.0	8.7	16.0	6.0	5.2	12.4	75.4	75.9	69.0
Colorado	9.8	9.6	16.4	7.9	7.5	14.2	77.6	78.4	67.7
Connecticut	8.8	7.3	13.5	6.7	5.8	12.8	85.8	88.6	66.9
Delaware	11.7	9.4	20.0	6.7	4.9	12.2	78.2	83.0	63.0
District of Columbia	15.3	*10.6	22.8	13.5	5.1	16.1	59.3	79.3	56.0
Florida	10.6	8.0	18.7	7.7	6.0	13	68.4	74.1	50.5
Georgia	12.7	10.3	17.5	8.2	6.2	12.2	73.5	80.2	61.1
Hawaii	8.9	8.3	*14.4	7.0	5.2	8.4	77.5	82.6	83.4
Idaho	10.4	10.4	-	5.6	5.6	7.9	76.1	76.4	76.0
Illinois	11.6	9.2	20.6	7.4	5.5	13.9	78.4	82.2	65.0
Indiana	10.1	9.0	19.4	6.5	5.8	11.8	77.3	79.5	56.6
Iowa	9.1	8.8	18.5	5.1	4.9	10.6	85.7	86.2	74.6
Kansas	9.5	8.5	19.2	6.4	5.7	12.5	81.2	83.1	68.1
Kentucky	9.7	9.5	12.3	6.8	6.4	11.2	75.6	77.0	62.1
Louisiana	11.8	8.0	17.7	8.7	6.0	12.7	78.6	85.9	67.9
Maine	8.3	8.2	*17.9	5.4	5.3	7.1	83.1	83.3	68.0
Maryland	11.5	8.8	18.1	7.8	5.5	12.8	80.3	86.4	66.9
Massachusetts	7.2	6.6	14.4	5.7	5.1	11.4	84.0	85.6	69.0
Michigan	10.7	8.4	21.4	7.4	5.5	14.3	80.4	82.9	69.7
Minnesota	8.7	8.2	17.4	5.0	4.6	13.2	80.0	82.0	58.8
Mississippi	13.7	9.9	18.2	9.0	6.3	12.0	76.0	84.9	65.9
Missouri	10.2	8.9	17.5	7.0	5.8	12.8	80.0	82.3	67.9
Montana	10.0	9.3	-	5.5	5.4	14.1	77.3	76.0	55.4
Nebraska	8.6	8.0	16.2	5.5	5.1	12.4	81.6	82.9	68.4
Nevada	9.6	9.2	17.9	6.9	6.0	12.7	73.7	76.0	57.2

State	Infant Mortality			Low Birthweight			Early Prenatal Care		
	All	White	Black	All	White	Black	All	White	Black
New Hampshire	7.8	7.8	*12.8	4.9	4.9	4.5	83.7	83.9	72.7
New Jersey	9.4	7.3	18.1	7.0	5.4	13.0	81.3	84.8	66.9
New Mexico	8.1	7.8	*19.9	7.1	7.1	12.1	58.4	60.1	51.5
New York	10.7	9.0	17.2	7.6	6.0	13.0	71.7	77.7	51.1
North Carolina	11.9	9.4	18.2	7.9	6.0	12.4	77.7	83.9	63.5
North Dakota	8.7	8.1	-	4.9	4.8	2.1	82.1	83.8	80.0
Ohio	9.3	8.2	15.3	6.6	5.6	12.1	82.2	84.4	68.9
Oklahoma	9.6	9.5	14.0	6.7	-	11.1	71.5	75.6	56.8
Oregon	10.4	10.5	*17.7	5.4	-	12.6	73.9	74.6	62.1
Pennsylvania	10.4	8.3	22.3	6.9	5.5	14.0	78.0	82.3	52.7
Rhode Island	8.4	8.1	*11.7	6.0	5.4	11.8	85.4	87.4	69.6
South Carolina	12.7	9.7	17.8	8.6	6.1	12.8	67.3	76.5	53.0
South Dakota	9.9	8.0	*7.9	5.2	5.0	6.3	74.1	73.5	62.2
Tennessee	11.7	9.2	19.7	8.1	6.5	13.3	75.2	78.7	64.0
Texas	9.1	8.3	15.1	6.9	6.0	12.3	66.8	68.4	56.4
Utah	8.8	8.9	*9.1	5.7	5.6	10.6	82.0	63.0	64.4
Vermont	8.5	8.4	*33.3	6.9	5.3	3.3	78.9	79.0	65.4
Virginia	10.2	8.2	17.0	5.7	5.5	11.5	80.1	84.3	68.1
Washington	9.7	9.4	15.2	5.3	4.9	10.3	77.4	78.8	65.5
West Virginia	9.8	9.5	*17.3	7.1	6.9	11.1	70.6	71.3	54.2
Wisconsin	8.6	7.8	16.5	5.4	4.7	12.5	82.8	85.5	63.3
Wyoming	9.2	9.0	*17.9	7.7	7.7	11.6	80.0	80.6	65.9
United States	10.1	8.6	17.9	6.9	5.7	12.7	75.9	79.2	61.6

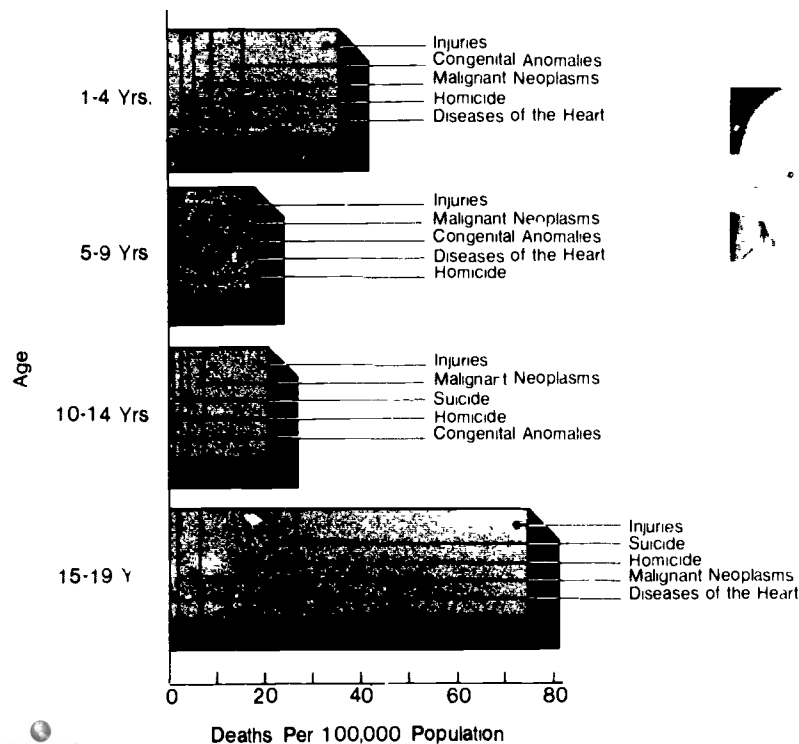
\*Rate based on less than 20 infant deaths



## HEALTH STATUS—Child

### Leading Causes of Death, 1986 Rate Per 100,000 Population

Source: National Center for Health Statistics



### CHILD MORTALITY

Injuries are the leading cause of death among all children.

Homicide and suicide are major contributors to the causes of death in adolescents 15 through 19 years of age.

In 1986, 32,492 children of ages 1 through 19 died.

#### NOTE

The rates in this figure for injury, homicide, and suicide were determined by using the following ICD-9 E Codes:

Injuries: E800-E949

Homicides: E940-E947B

Suicides: E950-E959

# HEALTH STATUS—Child

## CHILD HOSPITALIZATION

### Causes

In 1987, diseases of the respiratory system were the major cause for hospitalization of children 1 through 9 years of age, accounting for 35% of all discharges.

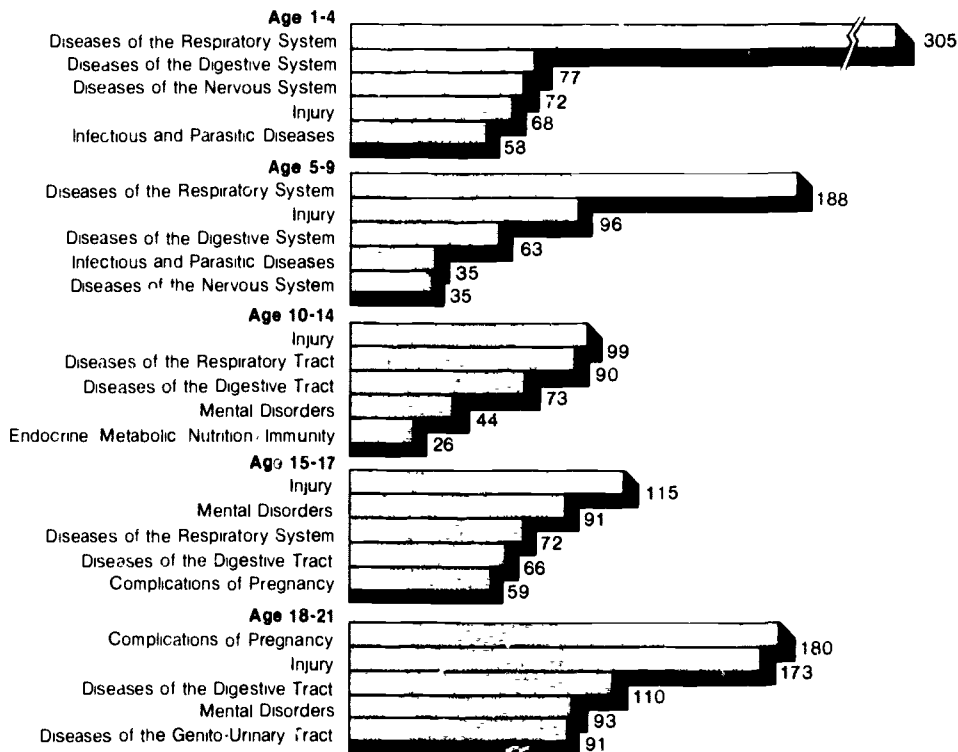
Hospital discharge rates decline with age until the age of 14, when they begin to increase.

While injuries are the leading cause of death for children greater than 1 year of age, this category accounted for only 13% of the hospital discharges in 1987.



## Major Causes of Hospitalization by Age Ages 1-4, 5-9, 10-14, 15-17

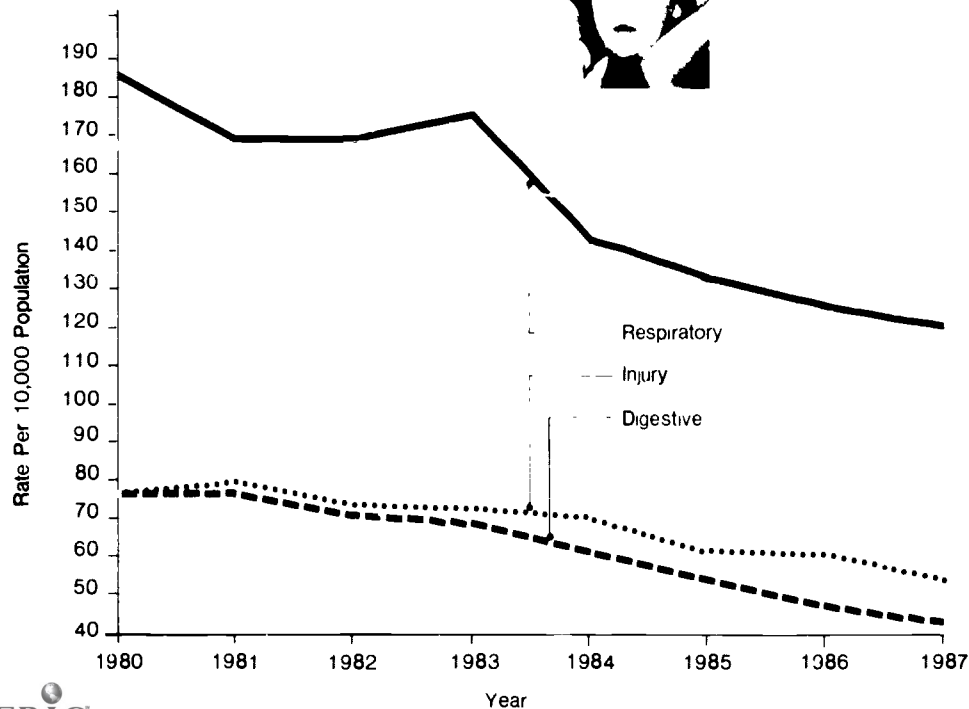
Source: National Center for Health Statistics



Number of Hospitalization in 1000 s

# Discharge Rate for Selected Diagnoses: 1987 Patients Age 1-14

Source: National Center for Health Statistics



## Trend

Between 1980 and 1987, there was a 35% decline in the hospital discharge rate for disease of the respiratory system for children aged 1 through 14 years.

Since 1980, there has been a 62% decrease in overall hospital discharge rates for children aged 1 through 14 years.

Three diagnostic categories—diseases of the digestive system, diseases of the respiratory system, and injury—accounted for 54% of the discharges of children aged 1 through 14 years in 1987

## HEALTH STATUS—Child

### ORAL HEALTH

The prevalence of dental caries increases with age. From 1971 to 1987 there was a decline in the prevalence of dental caries for children aged 5 through 17 years of age.

Studies show that one half of the school children in the U.S. have no decay in their permanent teeth.

In 1987, children 5 through 9 years of age had an average of 4 baby tooth surfaces affected by decay.

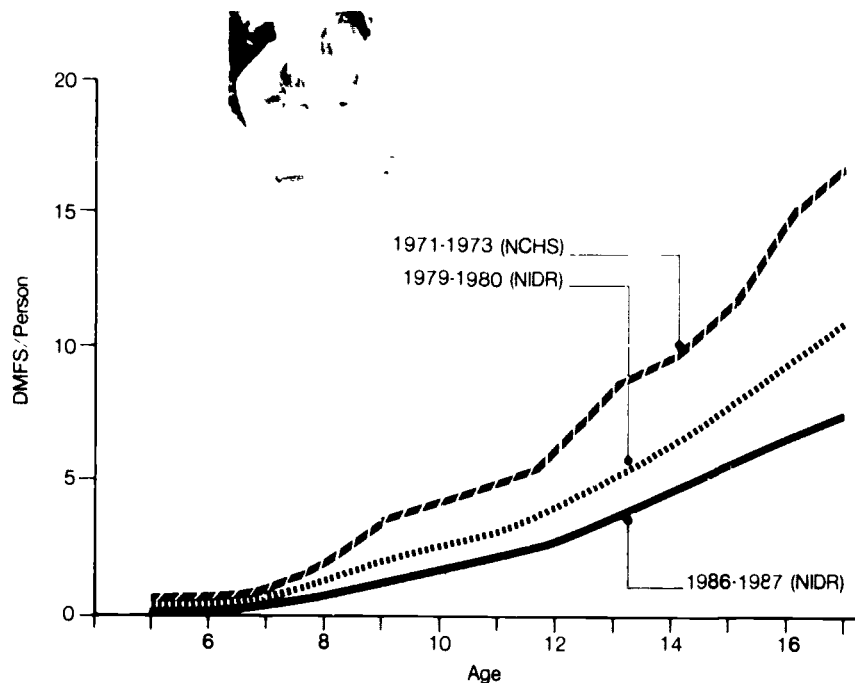
*The incidence of dental caries is closely associated with income and education. The average number of decayed teeth increases as household income and education decreases.*

*In a number of studies, the prevalence of Baby Bottle Tooth Decay (BBTD) has been reported to be 5% in children aged through 4 years. However, over half (53%) of children from low income families and Native American children have BBTD.*

*Decreases in the incidence of dental decay have been largely attributed to the presence of fluoride in community water supplies, toothpaste and other forms.*

### Age-Specific Prevalence of Dental Caries (DMFS) in 3 National Surveys

Source: National Institute of Dental Research



## Child Injuries by place of occurrence 1987

Source: National Center for Health Statistics



## INJURIES

Injuries occurring at school account for 21.2% of all injuries among children aged 10 through 14 years.

The most common single site of injuries to children under age 15 is the home.

\* Relative Standard Error (RSE) of numerator is more than 30%

### Age 0-4

- \* Other 13.5%
- \* School 1.5%
- \* Street 1.8%

Unknown 23.7%

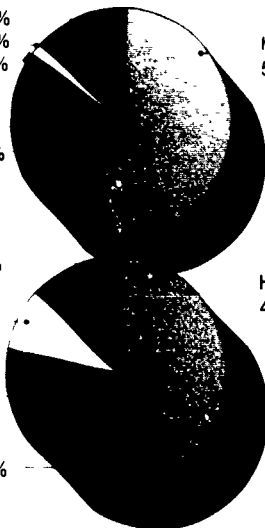
### Age 5-9

\* School 13.4%

\* Street 8.8%

Other 18.2%

Unknown 17.8%



### Age 10-14

Other 23.4%

\* Street 7.4%

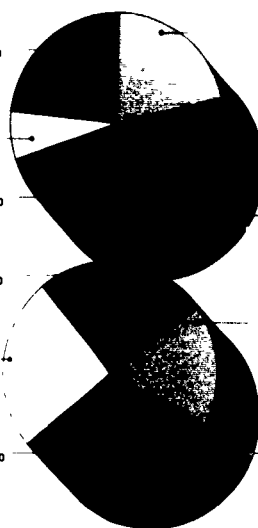
\* Unknown 11.3%

### Age 15-19

Other 25.7%

School 25.2%

Street 18.6%



School 21.2%

Home 36.8%

Home 17.9%

Unknown 12.5%



## HEALTH STATUS—Child

### CHILD ABUSE AND NEGLECT

There were almost 2.2 million reports of abused or neglected children nationwide in 1987. This represents an increase of 225% since 1976.

*An estimated 30% of individuals who were physically or sexually abused or extremely neglected as children become abusive parents themselves.*

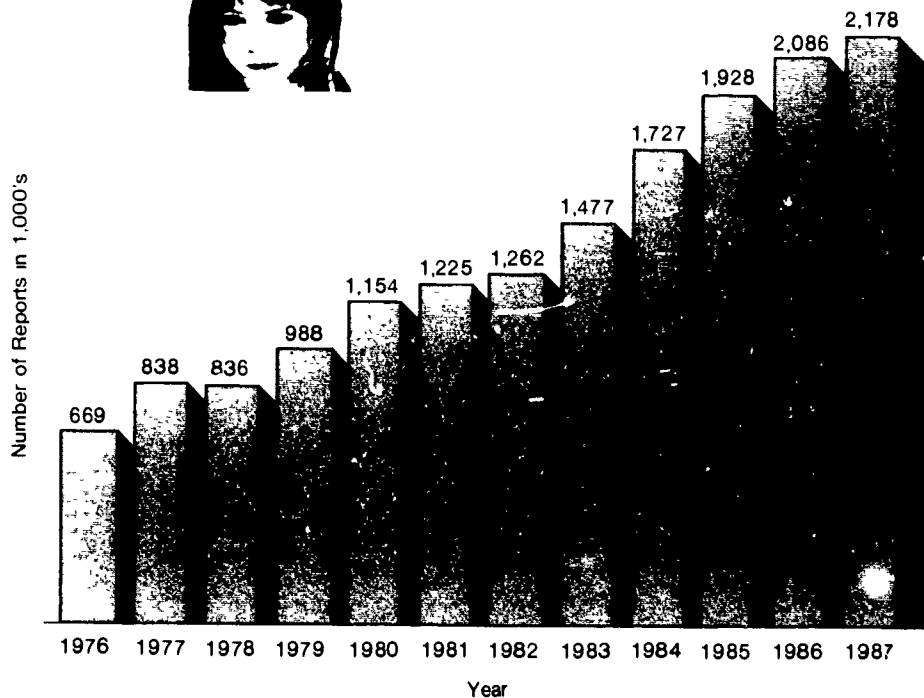
*The increasing number of reports of child abuse or neglect between 1976 and 1987 may reflect improved recognition of the problem, improved statewide reporting systems, and/or a larger number of affected children.*

Note: A precise definition for child abuse cannot be made because the definition and policy varies from state to state.



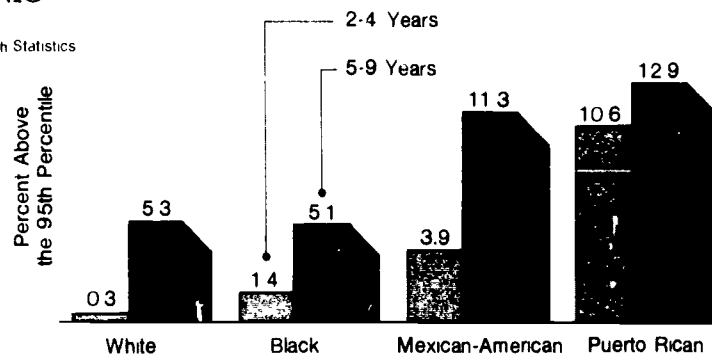
### National Estimates of Child Abuse and Neglect Reports 1976-1987

Source: National Center on Child Abuse and Neglect



### Males Weight for Height (HANES II, HISPANIC HANES)

Source: National Center for Health Statistics



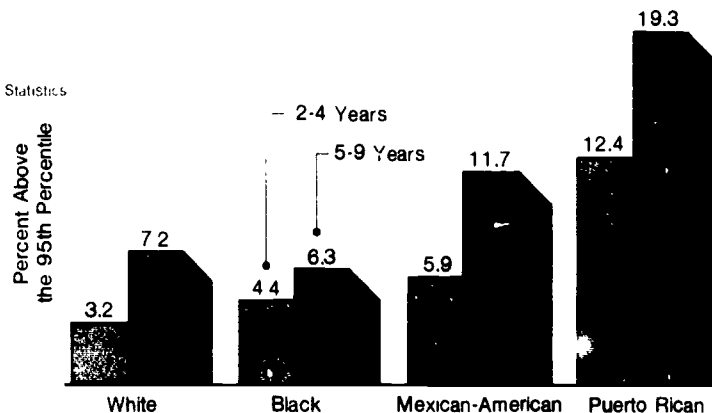
### CHILDHOOD OBESITY

Although the prevalence of obesity in white and black children is about 5%, the prevalence in most Hispanic subgroups is over twice this.

There are more obese females than obese males for these age and racial/ethnic groups.

### Females Weight for Height (HANES II, HISPANIC HANES)

Source: National Center for Health Statistics



## HEALTH STATUS—Adolescent

### SELECTED CAUSES OF DEATH AMONG 10-19 YEAR OLDS

#### By Race

The homicide rate for blacks aged 10 through 19 years is significantly greater than for whites.

#### By Sex

Many more males than females died from homicide, suicide, motor vehicle related injuries and other traumatic injuries.

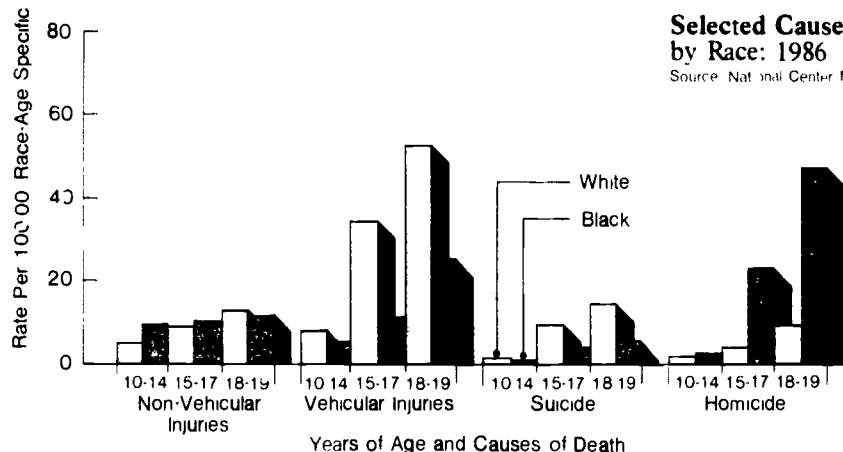
*In 1986 there were 20,930 deaths of adolescents aged 10 through 19 years.*

*Fires and drowning are the two leading causes of nonmotor vehicle injury deaths in this age group.*



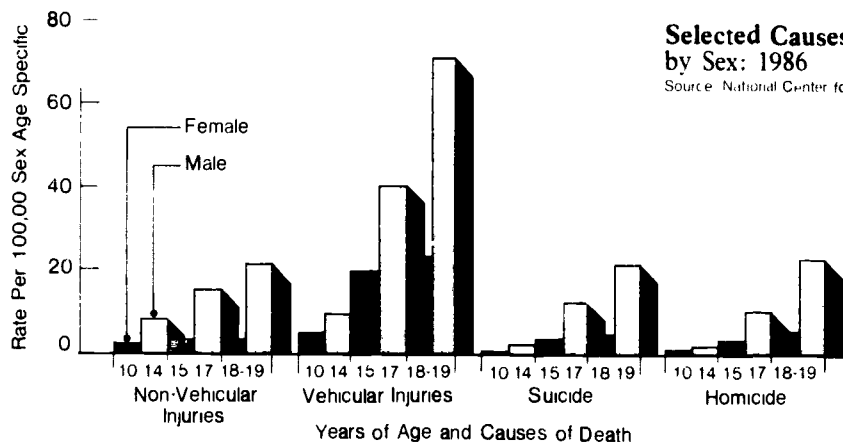
### Selected Causes of Death by Race: 1986

Source: National Center for Health Statistics



### Selected Causes of Death by Sex: 1986

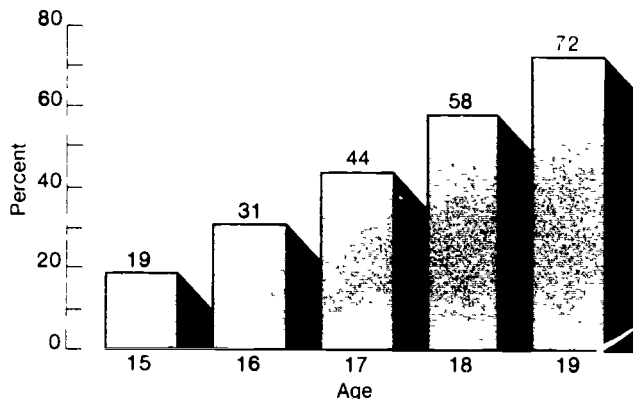
Source: National Center for Health Statistics





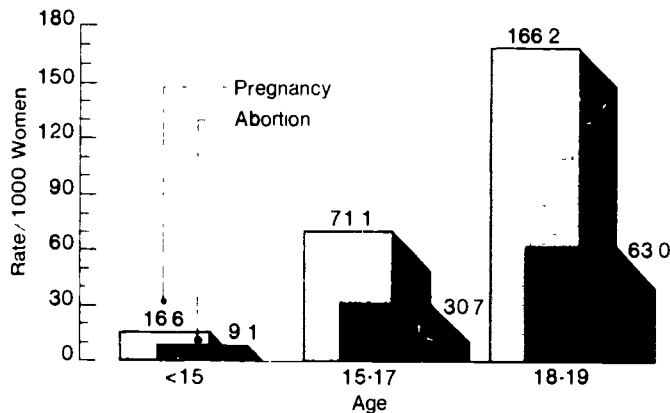
### Percentage of All Females who had ever had Inter- course by Age U.S. 1982

Source: Alan Guttmacher Institute



### Rate of Pregnancy and Abortion by Age: 1985

Source: Alan Guttmacher Institute



## TEENAGE SEXUALITY

### *Sexual Activity*

In 1982, nearly 20% of 15 year-old females had intercourse; increasing by more than 10 percentage points each year to 72% of all 19 year olds.

### *Teen Pregnancy*

In 1985, more than half of all pregnancies to teenagers under 15 years were reported to end in abortion. The percent of pregnancies ending in abortion decreased with age to 38% in those women 18-19 years.

In 1985, 1,031,000 teenagers became pregnant; of these, 31,000 were younger than 15. The outcomes included 477,700 live births and 416,170 induced abortions (137,120 spontaneous abortions)

Women younger than 20 accounted for 26% of all abortions and 13% of all births.

Each year, of teenagers aged 15 through 19, one American in 10 becomes pregnant, as compared with fewer than one teen in 20 in Canada, England or France.

## HEALTH STATUS—Adolescent

### Childbearing

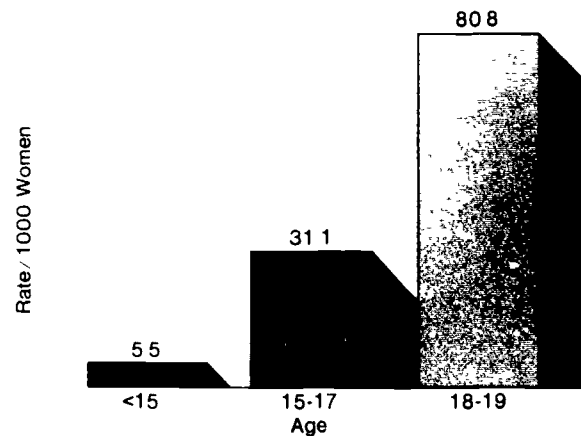
In 1985, the live birth rate/1000 was 5.5 for teenagers less than 15 years, 31.1 for those 15 through 17; 80.8 for those 18 through 19 years.

In 1985, there were 62,669 live births among black females under 18 years of age which represented 10.4% of all births to black women. There were 110,143 births to white females under 18 years of age which represented 3.7% of all births among white women.

*In the United States, approximately 55 million women are of childbearing age (15-44 years of age).*

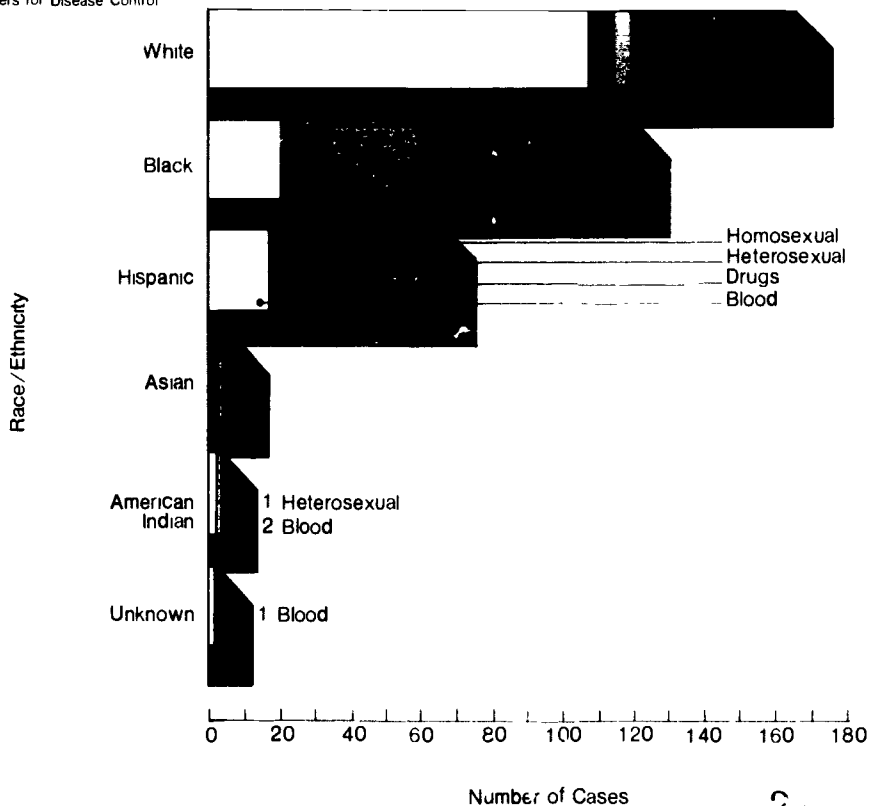
### Live Births by Age of Mother U.S. 1985

Source: National Center for Health Statistics



### Adolescent AIDS by Race and Exposure Category Ages 13-19 for 1988

Source: Centers for Disease Control



### ADOLESCENT AND YOUNG ADULTS/AIDS

#### Adolescent

As of April 1989, 372 cases of AIDS were reported in adolescents aged 13 through 19 years.

Whereas the majority of cases of AIDS occurring in whites are related to blood product exposure, the majority in blacks and Hispanics are a result of sexual activity and drug use.

## HEALTH STATUS—Adolescent

### Young Adult

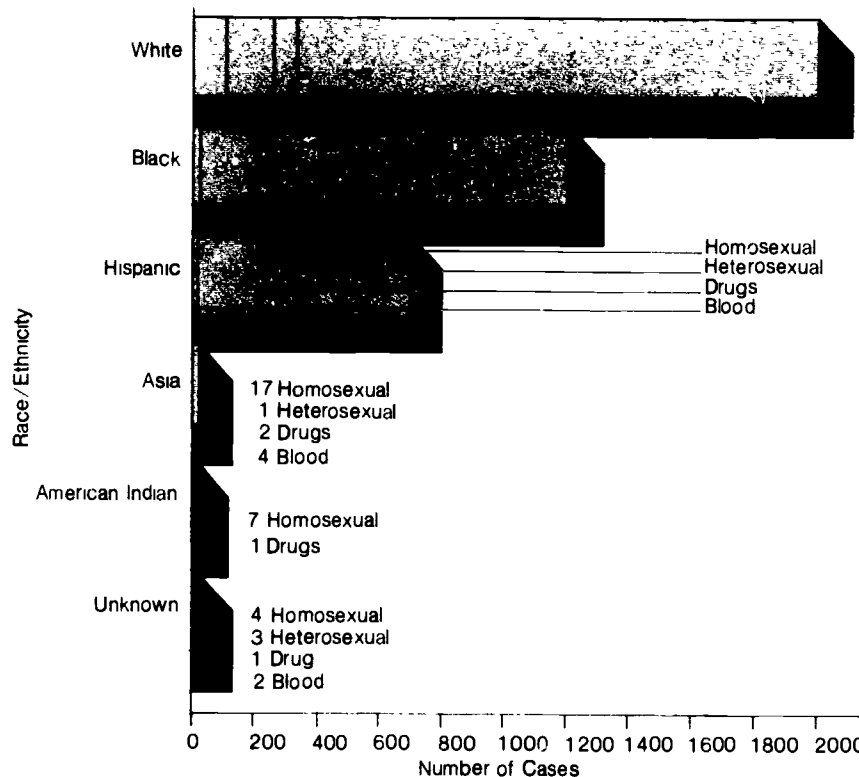
As of April 1989, 4137 cases of AIDS were reported in young adults aged 20 through 24 years.

Across all racial/ethnic groups, sexual activity was the major exposure category although drug related exposure was a significant contributor to AIDS in the hispanic population.

Due to the long latency period (up to 9 years) the majority of cases seen in this age group were the result of exposure occurring during adolescence.

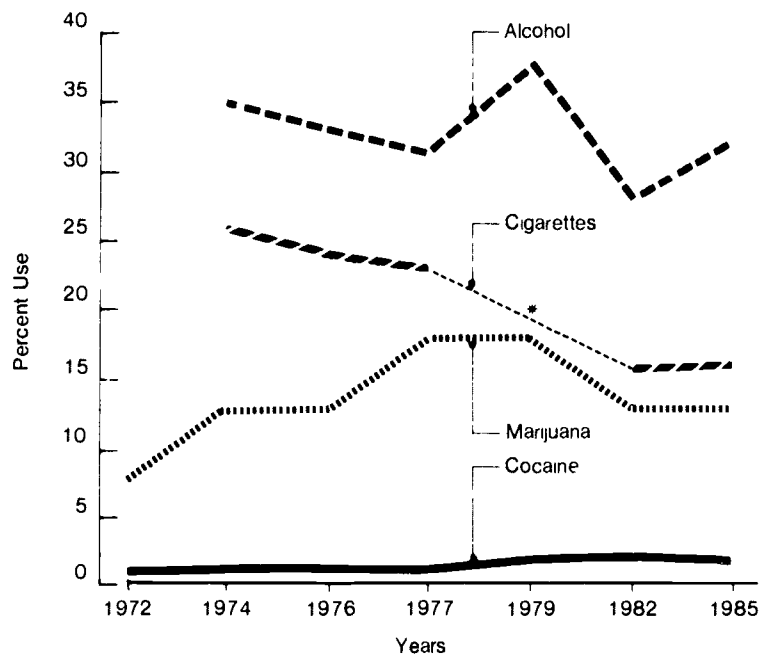
### Young Adult AIDS by Race and Exposure Category Ages 20-24 for 1988

Source: Centers for Disease Control



# Use of Selected Substances in the Past Month: 1972-1985 Ages 12-17 Years

Source: National Institute of Drug Abuse



\* No data for 1979 available

## SUBSTANCE ABUSE

Alcohol continues to be the most widely abused substance among teenagers.

Cigarette smoking has declined steadily among all persons aged 12-17 years over the past decade.

Although the use of marijuana peaked in the late 1970's with 17% then indicating use in the past month, there has been an apparent decline in the 1980's.

While the National Household Survey reported 1.5% of 12-17 year olds had used cocaine during the past month, the National Adolescent School Survey reported that more than 3% of the students report using cocaine during the past month.

## HEALTH SERVICES



Important factors which influence health outcome for mothers and children, especially for those at high risk, is availability of and access to quality health care. It is estimated that thirty-eight million Americans do not have health care coverage. There is no universal coverage for women and children in the United States. Although private physicians and hospitals provide "free" care, many Americans are still unable to receive the preventive services they need. Many wait for life-threatening events to occur before they seek care. The finest and most effective intervention programs are of little value if they are not available.

The data presented in this section indicate the availability and utilization of health care by source, type and place of care.

## Immunization Levels \*

1-4 years of age

Source: Centers for Disease Control

	1970	1976	1983	1984	1985
<b>Polio</b>	37.2	61.7	64.0	60.9	58.9
<b>Measles</b>	57.2	65.9	64.9	62.8	60.8
<b>Mumps</b>	—	48.3	59.5	58.7	58.9
<b>DPT (3 + doses)</b>	76.1	71.4	65.7	65.7	64.9
<b>Polio (3 + doses)</b>	65.9	61.6	57.0	54.8	55.3

## IMMUNIZATION OF CHILDREN

In 1983, the U.S. reached its highest level of childhood immunizations against all five of the common preventable childhood diseases. However, more than one third of children aged 1-4 years were not appropriately immunized.

*In 1987, nearly 98% of children entering kindergarten/1st grade were fully immunized against all five of the common preventable childhood diseases.*

*A reported increase in the incidence of measles and mumps suggest that the population of children fully immunized may be declining.*

Note: Based on information from the U.S. Immunization Survey for respondents answering questions after referring to an immunization record.

## HEALTH SERVICES

### PRENATAL CARE

#### Early Prenatal Care

Overall, 76% of all mothers began early prenatal care in the first trimester of pregnancy, the same proportion that has been observed annually since 1979.

The racial disparity in the timely receipt of prenatal care continues to be substantial. In 1986, 79% of white mothers as compared to 62% of black mothers received early prenatal care.

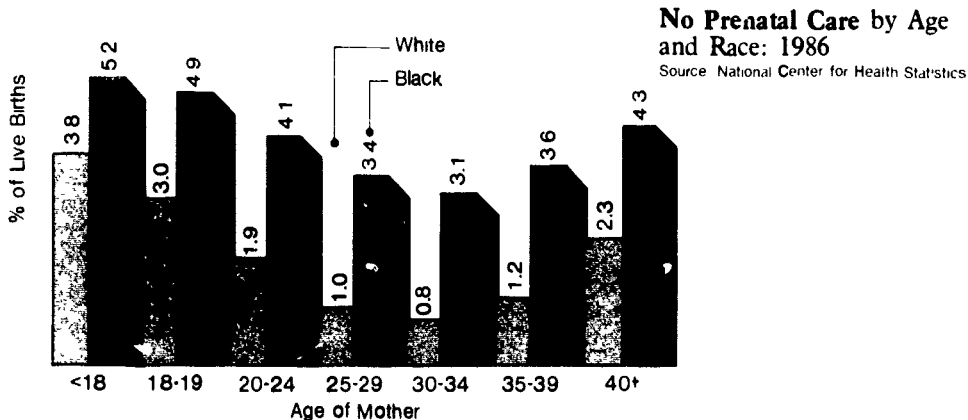
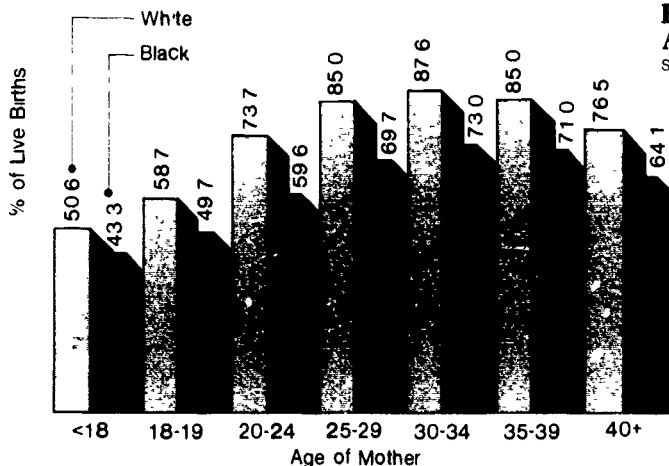
Six percent of infants were born to mothers whose first visit for prenatal care was late or to those who had received no prenatal care.

#### Prenatal Care

Black women of all ages are more likely not to receive prenatal care than white women.

Women under 20 years of age are less likely than older women to receive early prenatal care.

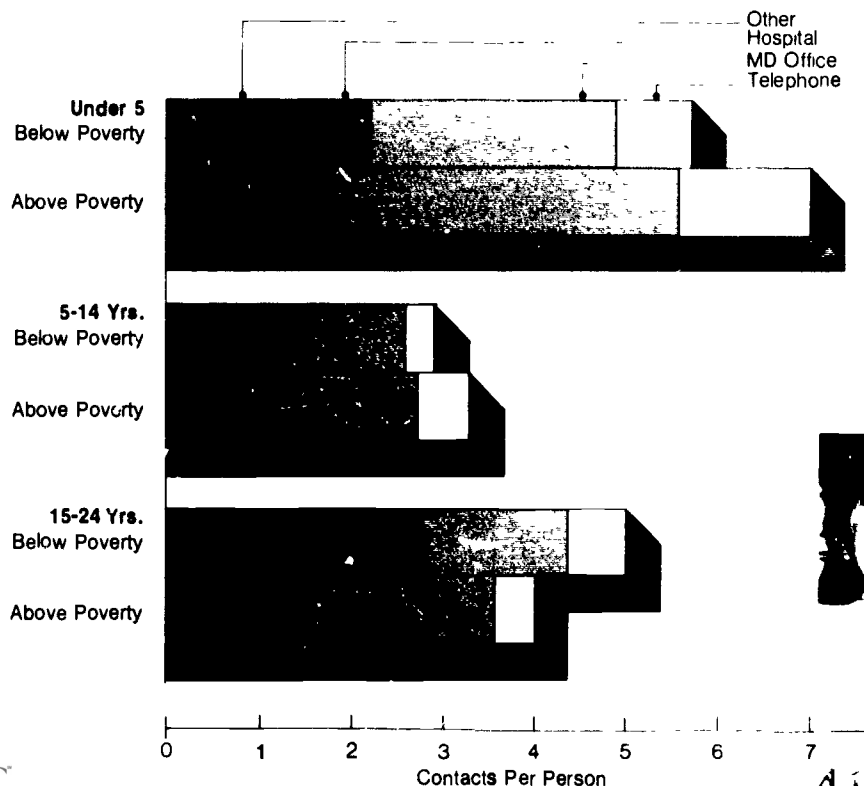
Risk factors for not receiving prenatal care include: women who are under 18 years old, unmarried, low educational attainment, and being of minority status.





**Place of Physician Contact  
by Age and Poverty**  
**Status: 1987**

Source: National Center for Health Statistics



**PLACE OF PHYSICIAN CONTACT**

In 1987, children less than 15 years of age whose family income was above poverty used more services offered through physicians' offices whereas children from poor families were more likely to use hospital services and other sources.

On the other hand, adolescents and young adults aged 15 through 24 years living below poverty had more physician contacts, and had a greater use of hospital and other sources than those living above poverty.



## HEALTH SERVICES

### PHYSICIAN VISITS

A lower percentage of black children of all ages were seen by physicians in the past year as compared to white children.

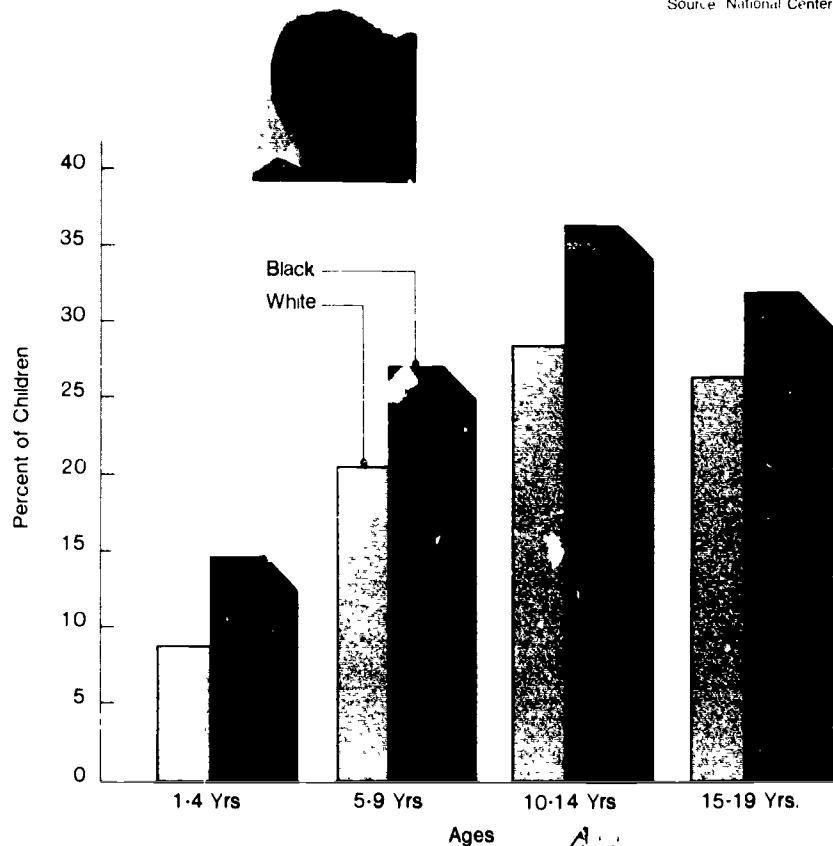
Of those children from 1 through 4 years of age, nearly 10% of white and 15% of black children had not been seen by a physician in the previous year.

In 1987, 15 million children, about 22% of all under 20 years of age, had not been seen by a physician in the previous year.

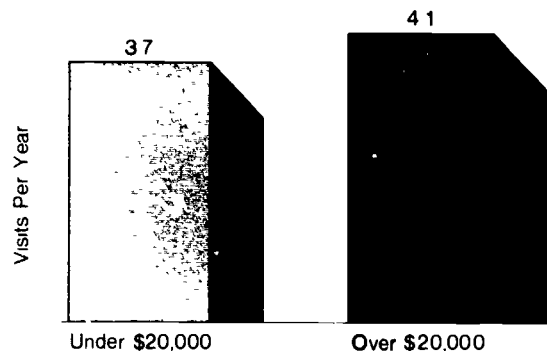


### No Physician Visits in Past Twelve Months: 1987

Source: National Center for Health Statistics



### Physician Utilization by Income Status 1987



### PHYSICIAN/HOSPITAL UTILIZATION BY INCOME STATUS

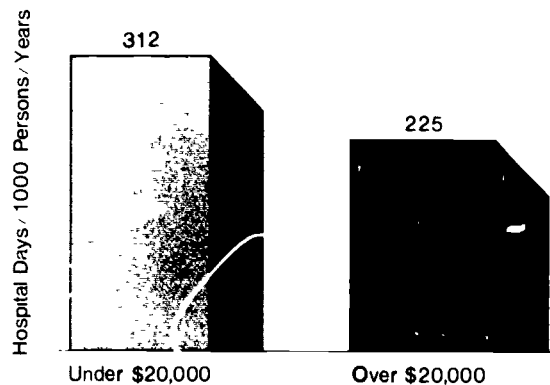
Children whose families earn less than \$20,000 per year had fewer physician contacts than those who earn more.

Children from families earning less than \$20,000 had nearly 40% more hospital days.

*These observations may suggest that children from poorer families do not receive health care until later in the course of their illness and, as a result, require more hospitalization.*

### Hospital Utilization by Income Status 1987

Source: National Center for Health Statistics



## HEALTH SERVICES

### HEALTH CARE FINANCING

#### Insurance Coverage

The 1986 Current Population Survey found that 19% or 10.6 million children under 18 had no insurance coverage. Over 16% of children were publicly insured primarily through Medicaid and 67.5% were privately insured primarily through employer sponsored coverage.

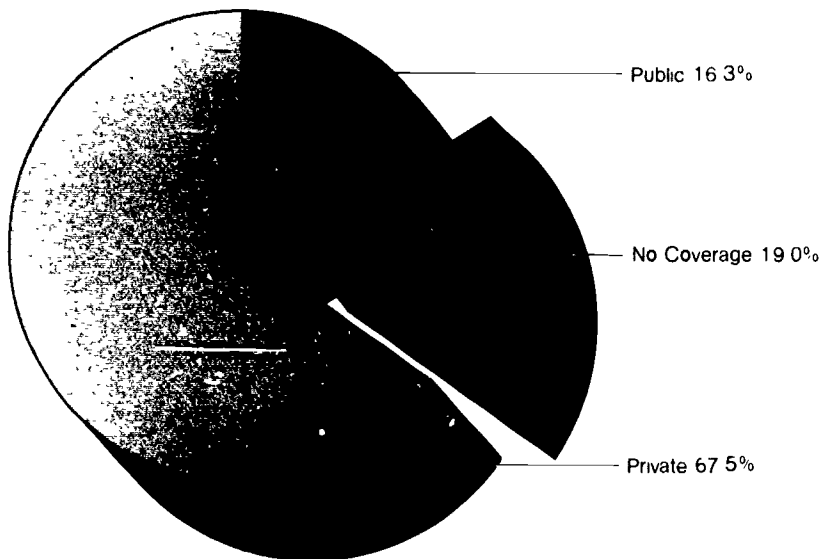
Over half of all uninsured children resided in families whose head was employed full-time and full-year. Another one-third of children without insurance protection lived in families whose head was a part-time or part-year worker. Only 12% of all uninsured children were from families with unemployed parents.

Thirty-three percent of all uninsured children had family incomes below poverty; 58% had incomes between 100-200% of poverty; and 11% had incomes above 200% of poverty.

*Note:* Percentages do not total 100% due to some children being covered by public and private sources.

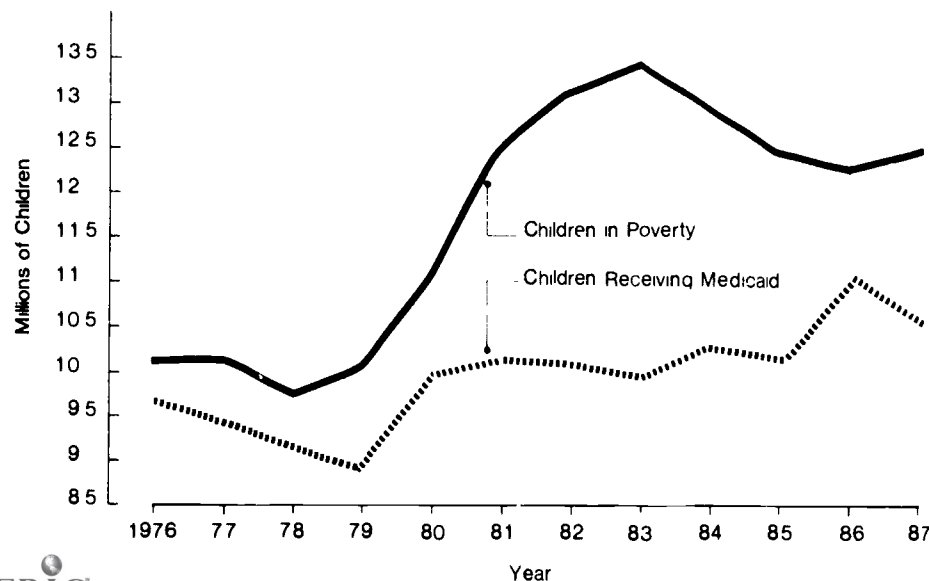
### Health Insurance Coverage of Children Under 18 Years of Age: 1986

Source: Chellot, 1988



## Children in Poverty and Children Receiving Medicaid, 1976-1987 (In Millions)

Source: Health Care Financing Administration and U.S. Bureau of the Census



## Medicaid Coverage

Medicaid covers only about half of all poor children. Since 1982, the percentage of poor children insured by Medicaid has steadily increased although the proportion is still much lower than it was in the 1970's.

*To qualify for Medicaid under the Aid to Families with Dependent Children (AFDC) category, the average annual income threshold for a family of three in 1987 was \$4,638 or 49% of the federal poverty level, according to HCFA's Office of the Actuary.*

*In 1987, children under 21 represented 52% of all Medicaid recipients and only 19% of expenditures. Adults represented 47% of all recipients and 81% of expenditures. The average payment per child recipient was \$742 compared to \$3,362 for adults.*

Numbers in 1986 reflect reporting system improvements of aggregated data.

## HEALTH SERVICES

### USE OF PHYSICIAN SERVICES BY PERCEIVED HEALTH STATUS

In almost all age and health categories, those children living below poverty were less likely to see a physician than those living above.

For those children under 5 perceived to be in poor health, those living above poverty were  $2\frac{1}{2}$  times more likely to have seen a physician than those below.

Regardless of poverty status, children in perceived poor/fair health use more physician services than those who are perceived to be in excellent or very good health state.

Note: The perceived health status as determined by the survey responder, most likely to be a parent.

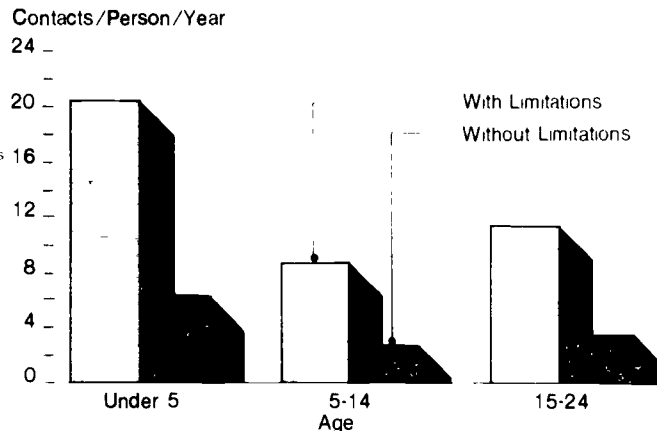
### Use of Physician Services by Perceived Health Status Age and Poverty Status: 1987

Source: National Center for Health Statistics



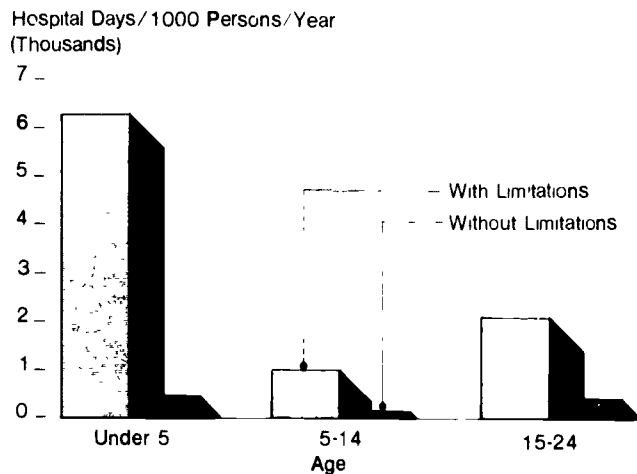
### Physician Utilization: With and Without Limitation in their Activities due to Chronic Conditions: 1987

Source: National Center for Health Statistics



### Hospital Utilization: With and Without Limitation in their Activities due to Chronic Conditions: 1987

Source: National Center for Health Statistics



### PHYSICIAN/HOSPITAL UTILIZATION IN CHILDREN WITH CHRONIC CONDITIONS

#### Physician Utilization

Five percent of all U.S. children are limited in their activities; however, they account for 11% of all physician contacts among children.

Children limited in their activities have 2½ times as many physician contacts as other children.

In 1987, children under 5 years of age with limited activities due to chronic diseases had greater than 3 times as many physician contacts as other children.

#### Hospital Utilization

Children ages 1 through 19 limited in their activities spend over 11 times as many days in the hospital as other children.

Although accounting for only 5% of all U.S. children, these children account for 40% of all hospital days among children aged 1 through 19 years.

## HEALTH SERVICES

### LIMITATION OF ACTIVITY DUE TO CHRONIC DISEASES

#### Male/Female

In children from 1 to 19 years of age, the percentage of males with limitation of activity due to chronic illness is consistently higher than females.

#### Income

Children from families where annual income falls below \$20,000 were consistently more limited in activity due to chronic conditions.

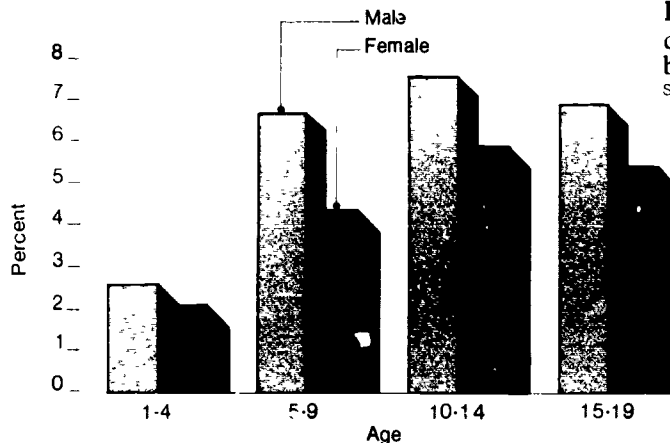
For children aged 5-9 years, those whose family income exceed \$20,000 were nearly half as likely as those with a family income below \$20,000 to have limitation of activity due to chronic conditions.

*The proportion of children with limitation of activity has doubled since 1960. A number of factors may have contributed to this trend; these include improved data collection, greater awareness of chronic conditions, greater sensitivity to impairment, and improvements in lifesaving medical technology.*

*In 1987, more than 3 million (5.1%) of all children 1 through 19 years of age were limited in their usual activities because of chronic illnesses and impairments.*

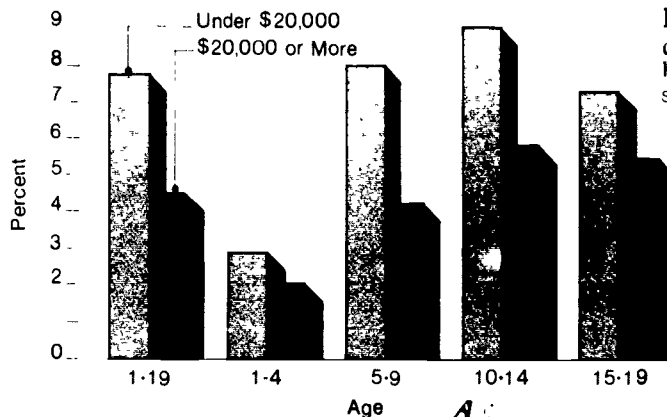
### Limitation of Activities due to Chronic Conditions by Age and Sex: 1987

Source: National Center for Health Statistics



### Limitation of Activities due to Chronic Conditions by Age and Income: 1987

Source: National Center for Health Statistics





## REFERENCES

### *Population Characteristics:*

U.S. Bureau of the Census. 1989. *United States Population Estimates, by Age, Sex, and Race: 1980-88. Current Population Reports. Series P-25, No. 1045.* Washington: U.S. Government Printing Office.

U.S. Bureau of the Census. 1984. *Projections of the Population of the United States, by Age, Sex, and Race, 1983 to 2080. Current Population Reports. Series P-25, No. 952.* Washington: U.S. Printing Office.

U.S. Bureau of the Census. 1989. *Poverty in the United States, 1987. Current Population Reports. Series P-60, No. 163.* Washington: U.S. Government Printing Office.

U.S. Bureau of the Census. 1989. *Marital Status and Living Arrangements, 1988. Current Population Reports. Series P-20, No. 433.* Washington: U.S. Government Printing Office.

Hofferth, Sandra L. and Phillips, Deborah A. 1987. "Child Care in the United States, 1970 to 1995." *Journal of Marriage and the Family* 49 (August): 559-571.

Hofferth, Sandra L., 1987. Testimony before the House Select Committee on Children, Youth, and Families, Hearing on American Families in Today's Economy, July 1, 1987, pp. 166-187. Washington: U.S. Government Printing Office.

U.S. Department of Education. 1987. *Center for Education Statistics: Office of Educational Research and Improvement. High School and Beyond.* Washington: U.S. Government Printing Office.

### *Health Status:*

National Center for Health Statistics. 1989. *Health United States, 1988.* DHHS Pub. No. (PHS) 89-1232. Public Health Service. Washington: U.S. Government Printing Office.

National Center for Health Statistics. 1988. *Advance Report of Final Morbidity Statistics, 1986. Monthly Vital Statistics Report. Vol. 37 No. 6. Supp.* DHHS Pub. No. (PHS) 88-1120. Public Health Service, Hyattsville, Md.

National Center for Health Statistics. 1988. *Advance Report of Final Natality Statistics, 1986. Monthly Vital Statistics Report. Vol. 37 No. 3. Supp.* DHHS Pub. No. (PHS) 88-1120. Public Health Service, Hyattsville, Md.

Ross Laboratories. 1989. *Ross Laboratories Mothers Survey.* Division of Abbott Laboratories, USA. Columbus, Oh. Unpublished data.

Centers for Disease Control. 1989. *Division of HIV/AIDS.* Unpublished data.

Hutchings, John J. 1988. "Pediatric Aids: An Overview" *Children Today* May-June: 4-7.

Centers for Disease Control. 1989. *Division of Birth Defects and Developmental Disabilities. Congenital Malformations Surveillance.* Unpublished data.

National Center for Health Statistics. 1989. *Division of Vital Statistics.* Unpublished data.

National Center for Health Statistics. 1989. *Hospital Discharge Survey.* Unpublished data.

National Institutes of Health. 1988.  
National Institute of Dental Research.  
national Dental Caries Prevalence Survey  
of U.S. Schoolchildren 1986-87. News  
Release.

National Association for Protecting Chil-  
dren. 1989. Highlights of Official  
Aggregate Child Neglect and Abuse  
Reporting 1987. Denver, Co: The Ameri-  
can Humane Association.

National Center for Health Statistics.  
1989. Division of Health Examination  
Statistics. NHANES II, 1976-1980 and  
HHANES 1982-1984. Unpublished data.  
The Alan Guttmacher Institute. 1989.  
New York, NY. Unpublished data.

The Alan Guttmacher Institute. 1986.  
Teenage Pregnancy in Industrialized  
Countries. New Haven and London:  
Yale University Press.

National Institute on Drug Abuse. 1987.  
National Household Survey on Drug  
Abuse: Main Findings, 1985. DHHS  
Pub. No. (ADM) 87-1586.

National Institute on Drug Abuse. 1987.  
National Adolescent School Health  
Survey. Unpublished data.

### ***Health Services and Utilization:***

Centers for Disease Control. 1989. Divi-  
sion of Immunizations. Unpublished  
data.

National Center for Health Statistics.  
1989. National Health Interview Survey.  
1987. Unpublished data. Analysis by  
Paul Newacheck.

Choilet D. 1988. Public and Private  
Issues in Financing Health Care for Chil-  
dren. EBRI Issue Brief. No. 79.

Health Care Financing Administration:  
1989. 2082 data, Bureau of Data  
Management and Strategy. Unpublished  
data.



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